



UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

DIVISION OF
CORPORATION FINANCE

Mail Stop 3561

August 18, 2016

Via E-mail

Mark A. Smith
Chief Executive Officer
NioCorp Developments Ltd.
7000 South Yosemite Street, Suite 115
Centennial, Colorado 80112

**Re: NioCorp Developments Ltd.
Draft Registration Statement on Form S-1
Submitted July 27, 2016
CIK No. 0001512228**

Dear Mr. Smith:

We have reviewed your draft registration statement and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter by providing the requested information and either submitting an amended draft registration statement or publicly filing your registration statement on EDGAR. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing the information you provide in response to these comments and your amended draft registration statement or filed registration statement, we may have additional comments.

General

1. Please supplementally provide us with copies of all written communications, as defined in Rule 405 under the Securities Act, that you, or anyone authorized to do so on your behalf, present to potential investors in reliance on Section 5(d) of the Securities Act, whether or not they retain copies of the communications.

About This Prospectus, page vi

2. We note the statement in the third paragraph that you have not independently verified certain information in your prospectus. Please remove this language as you appear to be disclaiming responsibility for disclosure you have elected to include in your filing.

Risk Factors, page 5

3. Given the status of your properties, it would be appropriate to include risk factors that address risks commonly associated with resource estimates that are based only on a Preliminary Economic Assessment (PEA). Please address the risks associated with the following points:
 - The process testing is limited to small sample sizes and possibly bench scale testing.
 - The difficulty obtaining expected metallurgical recoveries when scaling up to production scale from pilot plant scale.
 - The preliminary nature of your mine plans and processing concepts.
 - The resulting preliminary operating/capital cost estimates and their associated accuracy at this stage.
 - Metallurgical flow sheets and recoveries are in development.
 - The history of Preliminary Economic Assessment studies typically underestimating project capital and operating costs.

We will require significant additional capital.... page 5

4. Please disclose your current financial position and quantify your anticipated capital requirements.
5. Please add a risk factor regarding the going concern raised by the independent public accountants.

Selling Security Holders, page 19

6. Please disclose whether any selling shareholders are broker-dealers or affiliated with broker-dealers. We note the disclosure in the sixth paragraph of this section.

Business, page 33

7. Please provide an expanded description of the general development of your business that addresses matters such as when you commenced the Elk Creek Project and acquired the Elk Creek Leases, when you established or acquired Elk Creek Resources Corp. and your relationship with Molycorp. Refer to Item 101(a) of Regulation S-K.

Cycles, page 37

8. We note you describe the commodity price cycles in this section. Please provide a table or graph illustrating the price trends of your proposed salable products (Niobium, Scandium and Titanium) for the last 5 years.

Employees, page 39

9. Please disclose the total number of your employees, in addition to the full time employees, as required by Item 101(h)(4)(xii) of Regulation S-K.

Title and Ownership, page 41

10. Please reconcile your disclosure regarding the leases in this section with your disclosure in the last risk factor on page 13 that you are still in negotiations regarding the renewal of certain sections of your property.
11. Please file as exhibits the agreements through which you acquired control of your mineral properties. Refer to Item 601(b) (10) of Regulation S-K.

Accessibility..., page 43

12. Please clarify your disclosure regarding the links between the company and the University of Nebraska.

Procedures, page 46

13. Detailed sampling provides the basis for the quality estimate or grade of your mineral discovery. Please provide a brief description of your sample collection, sample preparation, and the analytical procedures used to develop your analytical results. In addition, please disclose any Quality Assurance/Quality Control (QA/QC) protocols you have developed for your exploration program. These procedures would serve to inform potential investors regarding your sample collection and preparation, assay controls, sample custody, assay precision and accuracy procedures and protocols.

SRK Mineral Resource Statement, page 51

14. We note you use a 0.30 % niobium pentoxide cutoff to estimate your mineral resources. Please disclose and clarify whether this cutoff grade is a niobium equivalent grade utilizing the values of the other salable products or whether it is solely dependent on your niobium values.
15. Mineral resources must have reasonable prospects for economic extraction and any reportable resource estimate must have been delimited using an economically based cutoff grade to segregate resources from just mineralization. Please modify your filing

and disclose the calculation, analysis, and relevant modifying factors that substantiate your cutoff grades are based on reasonable economic assumptions. The relevant factors must realistically reflect the location, deposit scale and continuity, assumed mining method, metallurgical processes, operational/capital costs, and reasonable metal prices. Alternatively, if the resource estimates are not based on economic cutoffs, please remove the resource estimates from your filing.

Management's Discussion and Analysis of Financial Condition and Results of Operations, page 59

Strategic, page 59

16. Pursuant to the Instructions to Paragraph (b)(5) of Industry Guide 7, estimated values of measures other than reserves may not be disclosed unless such information is required to be disclosed by foreign or state law. As allowed by National Instrument 43-101 (NI 43-101) Part 2.3, disclosure of metrics such as Net Present Value (NPV), Internal Rate of Return (IRR), and payback period may be disclosed with appropriate qualifiers, but are not required. Please remove this financial information developed and/or derived from the possible development of your mineralized material or resources. This would include your operating or pre-tax cash flow, operating costs, capital expenditures, pre-tax net present value, internal rate of return, and payback period.

Recent Financing Activities, page 65

17. Please disclose the amounts of indebtedness currently outstanding under your various financing arrangements, where material. It appears, for example, that the amount outstanding of the related party loan described has been reduced based on your interim balance sheet disclosure.

Liquidity and Capital Resources, page 68

18. Please update your disclosure in this section. We note your disclosure references funds being sufficient for the fiscal year ended June 30, 2016. Please address the length of time you will be able to fund your business out of existing funds and your plans to arrange financing going forward. We note the disclosure on page 1 that you are focused on obtaining additional funds. Refer to Item 101(a)(2) and Instruction 5 of Item 303(a) of Regulation S-K, and footnote 43 in Securities Act Release No. 33-8350 for guidance.

Directors and Executive Officers, page 81

19. Please disclose the dates during which each of your executive officers served in the positions indicated. Refer to the requirements of Item 401(e) of Regulation S-K.

Security Ownership...., page 90

20. Please revise the disclosure in the footnotes to the table to clarify the nature of the beneficial ownership of common stock in each case. It is unclear how many shares of common stock are held directly and how many may be acquired under outstanding warrants and options. Refer to Item 403(b) of Regulation S-K.

Certain Relationships and Related Party Transactions...., page 92

21. Please provide the disclosure required by Instruction 1 to Item 404 of Regulation S-K for the two years preceding the registrant's past fiscal year.
22. For each related party transaction, describe the dollar value of the amount involved, the largest aggregate amount of principal outstanding, the amount outstanding as of the latest practicable date, the material terms of each transaction including applicable term and termination provisions and the interest rate. Refer to Item 404(a)(4), (5) and (6) of Regulation S-K.

Financial Statements

23. Please revise your filing to include the auditors' consent to the use of their audit report and the reference to the firm as "experts" as disclosed on page 93 of the registration statement.

Report of Independent Registered Public Accounting Firm, page F-1

24. Your auditors state in the second paragraph of their report that they conducted their audits "in accordance with auditing standards of the Public Company Accounting Oversight Board (United States)." Please tell us why your auditors refer to only the "auditing standards" of the PCAOB. If true, please ask your auditors to revise their audit report to state that their audits were conducted in accordance with "the standards of the Public Company Accounting Oversight Board (United States)," as required by the PCAOB Auditing Standard No. 1.

Consolidated Statement of Operations and Comprehensive Loss, page F-3

25. You have presented separate line items for "fair value of warrants expense" and "stock-based compensation" in your consolidated statement of operations. Please revise to classify these expenses into respective expense captions where the costs of the underlying transactions are ordinarily classified. Refer to the guidance at SAB Topic 14.F.

3. Significant Accounting Policies

c) Foreign Currency Translation, page F-7

26. We note that you have determined that your functional currency is the Canadian dollar. However, we note that all your properties are located in the United States and most costs

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associated with these properties are paid in the U.S. dollars as disclosed on page 13. Please provide your analysis using the factors outlined under ASC 830-10-55-5 to support Canadian dollar as your functional currency.

5. Mineral Interest

27. We note your disclosure that you purchased Elk Creek property through the issuance of shares with a total acquisition price of C\$13,246. Please expand your footnote disclosure to provide the terms of the agreement and how the purchase price of the shares was determined.

10. Income Taxes, page F-16

28. Please expand your footnote disclosure to provide the unrecognized tax benefit related disclosures outlined in ASC 740-10-50-15 and 15A.

Recent Sales of Unregistered Securities, page II-3

29. We note the statements in the first paragraph. Please revise your disclosure to state clearly, for each securities issuance, which exemption was relied upon and the facts relied upon to make the exemption available. Refer to Item 701(d) of Regulation S-K. Also disclose the persons to whom the securities were sold, as required by item 701(b).

You may contact Suying Li, Staff Accountant, at (202) 551-3335 or Nasreen Mohammed, Assistant Chief Accountant, at (202) 551-3773] if you have questions regarding comments on the financial statements and related matters. Please contact Ruairi Regan at (202) 551-3269 or Pamela Howell, Special Counsel, at (202) 551-3357 with any other questions.

Sincerely,

/s/ Pamela Howell
for

John Reynolds
Assistant Director
Office of Beverages,
Apparel and Mining

cc: Jason K. Brenkert, Esq.
Dorsey & Whitney LLP